EX PARTE OR LATE FILED

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February 2, 1999

Ms. Magalie R. Salas
Secretary
Federal Communications Commission
The Portals
445 12th Street
Washington, DC 20554

Re: Telephone Number Portability - CC Docket No. 95-116
Ex Parte Presentation

Dear Ms. Salas:

GTE is responding to the November 24, 1998 ex parte presentation made by the Telecommunications Resellers Association ("TRA"), where they described an alternative method for deploying wireless number portability called LRN Relay.[1] The same alternative method was also previously presented in the October 21, 1998 ex parte presentation.[2]

[1] *Ex Parte* Presentation from David Gusky, Vice President of Telecommunications Resellers Association, to the Honorable William E. Kennard, Chairman, FCC, filed November 24, 1998 (describing an alternate scheme to implement WNP, called "LRN Relay") (hereinafter "LRN Relay").

[2] *Ex Parte* Presentation from Linda Oliver, Counsel for Telecommunications Resellers Association, to Magalie R. Salas, Secretary, FCC, filed October 22, 1998 (notifying the FCC of an October 21, 1998 meeting to discuss TRA's opposition to the CTIA Petition for Forbearance and to describe an alternative implementation for wireless number portability in CC Docket No. 96-115).

GTE is reiterating and expanding on the comments we filed in our November 13, 1998 ex parte communication regarding the LRN Relay methodology.[3]

GTE believes the industry standards process performs a very important function. Specifically, standards facilitate vendors to develop interoperable products and to establish for carriers common communication protocols. The standards forums also provide a venue for any interested parties to identify issues and impacts to the network, to present solutions for issues and impacts, and to achieve interoperability. Without a standard, the solution is strictly a proprietary scheme (at best a de facto scheme). Finally, the regulatory arena is not as well equipped with technical experts as the standards bodies to properly evaluate a technical scheme.

Intersystem operations are vital to the provision of cellular services. They are the fundamental building blocks for supporting many mobility features. GTE feels that the introduction of wireless number portability must also ensure the continual operation of wireless networks. It is crucial that intersystem operations will not be detrimentally affected by any proposed WNP scheme(s). Thus, GTE urges the TRA to present its LRN Relay methodology to the standards bodies such as TIA/EIA TR-45.2.

GTE would like to reiterate the issues we raised in our November 13, 1998 filing regarding the LRN Relay method. GTE believes that at a minimum the LRN Relay scheme need to address these issues before we can regard it as a vital alternative WNP solution. Please refer to the attachment for detail discussion of the issues we raised in our earlier filing.

Please include a copy of this notification and the attached discussion material into the record of this proceeding in accordance with Section 1.1206 of the Commission's rules concerning ex parte communications. If there are, any questions regarding this matter please contact the undersigned.

Respectfully submitted,

May Chan
Director – Regulatory Matters

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[3] *Ex Parte* letter from GTE to Magalie R. Salas, Secretary, FCC, filed November 13, 1998 (commenting on TRA's proposed alternate method for implementing wireless number portability in CC Docket No. 96-115).

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Background Information:

ANSI-41 revision C (also known as IS-41.C), approved in 1996, formally recognizes the Mobile Identification Number (MIN) and Mobile Directory Number (MDN) as independent parameters. Revision C paved the way for MIN and MDN separation. The development of Revision C commenced in 1994, two years prior to Wireless Number Portability (WNP). The wireless industry accepted the treatment of MIN and MDN as separate parameters long before WNP. Furthermore, PCS 1900 based on GSM, also treats the mobile system identity and MDN as separate parameters. International Mobile Station Identifier (IMSI) is the mobile system identity in GSM.

In September 1996, CTIA sponsored an industry-wide forum to develop a WNP solution. The wireless industry chooses to preserve the separated MIN/MDN paradigm in developing the WNP solution (hereinafter "CTIA proposal") because it minimizes impact on cellular networks. This solution simply makes further use of the MIN/MDN separation for WNP. The CTIA proposal does not impact the existing roamer registration mechanism or the exchange of billing data for settlement. However, the complexity of the wireless networks still necessitates standards development to integrate WNP with the continuously evolving wireless networks.

TRA's Assessment of WNP is Flawed:

In TRA's ex parte presentation, they reflect a very limited understanding and many misunderstandings regarding the operation of ANSI-41 based wireless networks and the true extent of the impacts WNP have on wireless networks. This limited and inaccurate understanding has contributed to a flawed analysis, and to conclusions that are in error.

For example, TRA believes that Signaling Connection Control Part (SCCP) level routing using Global Title Translation (GTT) is widely used for the internetwork routing of ANSI-41 registration messages. In reality, the use of GTT is largely limited to intranetwork message routing. When SS7 is used for, internetwork routing of registration messages, Message Transfer Part (MTP) level direct point code routing is almost always used. The MSC/VLR uses the leading digits of the MIN to retrieve the requisite network address from its roamer agreement tables. It is also noteworthy that in some cases, ANSI-41 messaging is carried over X.25 rather than over Signaling System 7 (SS7) and SCCP-level routing is not applicable in this case.

In addition to its role in routing ANSI-41 messages, such as registration messages, the MIN is also used to route billing records from the systems visited by a subscriber to the subscriber's home system.

The impacts of WNP on systems subject to WNP go far beyond any changes needed to support ANSI-41 message routing or billing record routing, such as fundamental changes to MSCs to integrate WNP query processing with existing ANSI-

41-based call and feature processing. The complexity of the changes needed should not be underestimated.

TRA claims that if the CTIA's proposal regarding MIN/MDN separation is accepted, Wireless Systems outside areas of portability would be forced to make major upgrades to STPs used for ANSI-41 message routing. TRA also claims that if its proposal were adopted, no such changes would be necessary. Both claims are false, and, in fact, the opposite is true.

The CTIA proposal would maintain the relationship that exists between the leading digits of a subscriber's MIN and the subscriber's home HLR would continue in a number portability environment. When a subscriber ports, the subscriber's MDN would remain the same, but the subscriber's MIN would be updated to insure that it identifies the subscriber's new home HLR. Because of this, the CTIA approach requires no change to the routing tables or procedures used to route ANSI-41 registration messages to accommodate WNP. Moreover, the CTIA proposal would also allow carriers to continue to route billing records for settlement purposes without changes to that process.

In contrast, the TRA proposal requires the use of SCCP-level routing using GTT for ANSI-41 registration messages. This method is not often used today, as mentioned above. There would be a significant impact on all ANSI-41-based wireless systems, whether inside or outside the top 100 MSAs, if this approach were to be adopted. Also, even if the availability of SCCP-level routing were not an issue (which it is), the inefficiency of the TRA proposal, requiring ANSI-41 registration messages to be routed via the donor system, would still make it undesirable.

The TRA Proposal:

Based on TRA's October 22, 1998 ex parte presentation, their description for an alternative WNP implementation ("TRA proposal") is incomplete. The TRA proposal only attempts to address the most trivial aspect of WNP support, the routing of ANSI-41 registration messages. This proposal did not address other critical issues.

The TRA proposal did not address the routing of billing records for settlement purposes, and, if adopted, it would make such routing much more complex. The determination of the home system responsible for a call would involve both the subscriber's identity and the date on which each call was placed to allow for the possibility where a subscriber ported more than once during a settlement cycle. Any WNP proposal that impacts the use of MINs for ANSI-41 message routing has to provide for the routing of billing records for charges incurred while a subscriber is roaming to the wireless system that was the subscriber's home system at the time those charges are incurred, even if the subscriber ports his (or her) number one or more times during a settlement cycle.

The TRA proposal made no attempt to address the complex issues associated to the integration of WNP query processing with ANSI-41 call and feature processing. The

TRA proposal cannot be immediately implemented as claimed. As presented, it does not provide a workable solution for WNP.

Finally, TRA's alternative also specifies that the donor STP analyzes query request to determine whether the number is ported. STPs typically do not have this capability. This capability is usually performed by the MSC (in conjunction with the HLR). This proposal requires the development and deployment of this capability in donor STPs.